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Automated Serials Handling: The Perfect Future? The Swets Concept for Serials Control at an Affordable Price

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AUTOMATED SERIALS HANDLING: THE PERFECT FUTURE?
THE SWETS CONCEPT FOR SERIALS CONTROL AT AN AFFORDABLE PRICE

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INTRODUCTION

For some of you this paper will be another installment of a well-known serial story. In recent years several papers have been published about Swets, for instance, in IATUL's online issue and in the proceedings of the annual automation conferences held at the university of Essen. When reporting on facilities that Swets has developed and is still developing you may recognize some comments from these previous meetings.

Serials represent a very complex world. It is therefore no wonder that automation was slow to play a significant role. Swets as an international and large subscription agency has gathered much experience in the field of serials automation.

I would like to inform you briefly about the requirements we stipulated and encountered. Later I will go into more detail.

HISTORY

The experience of Swets with automation dates back to the fifties. It would be more correct to speak of mechanization since we implemented hardly more than card sorting machines, for that time still a huge step. In those days we simply wanted to reduce the burden of the amount of paper work and to streamline the ordering, cancelling, check-in and claiming procedures. Keywords in those days already were accuracy, efficiency and speed. Through automation we aimed to increase productivity as well as improve the level and scope of our services. At the same time we required that operational costs be kept at an acceptable level.

We gradually became aware of the wide range of possibilities and at the same time we started to realise the limitations. We now know that our early automation efforts were too much of a preservation and systematization of then current practices. Once you have a computer and software, the boundaries are more or less fixed.

A FRESH START RATHER THAN UPGRADING THE OLD SYSTEM

Some eight years ago we started again from scratch. The difficult decision was made to bring in a totally new concept, the database system, rather than again upgrade the sequential file system we had.
The first problem was to convince the staff. If you have well-functioning procedures, why change them? Secondly, practically nobody in our company at that time had experience with the development of database systems, multitask operating systems and online access techniques. Other problems were the necessary selection of hard- and software and the continuity of our services to both publishers and libraries during the changeover. We took on new staff to develop the new system in-house, rather than use software consultants or introduce and modify suitable packages, which were then hardly available. We also decided to run the old and the new system (and their respective computers) parallel for a considerable time in order to avoid a break in service to our clients.

Special attention was paid to user-friendly features. There are code lists, help pages and in case of error, the problem field will be highlighted. Our staff has learned to work with menu-screens. After the sign-on procedure a master option screen is presented. Highlighted options are available under the sign-on code.
As little input as possible, often not more than the entry of a single letter against the required option, is necessary to get access to the desired "information area" from which the user can select sub-options. The use of internal or external keys is not required, which is so often the case. If you happen to know an identification number, ISSN, ISBN, OCLC number etc., you can of course use it. Intelligent alpha search and read back facilities complete the picture.
The new system design has proved to be flexible and responsive to basic requirements and has been able to cope with many new demands. The central database has grown from 2300 megabytes to 8150 megabytes of online disk storage.

DECENTRALIZATION

With a variety of departmental activities in our main office ranging from publishing, distribution, antiquarian warehousing, data service centre and COM-production and with subsidiary offices in North America,

the U.K., France, Brasil and Japan, we have made available the major facilities for decentralized access and support. We now run publishing programmes in Lisse and Paris, work as a subscription agency in Paris; we have online access in Oxford and control serials check-in at our US office in Philadelphia.
We have built up extensive and valuable files and gained expertise in many library routines. Our two check-in departments handle more than 90,000 subscriptions in a fully automated environment.

THE AUTOMATION OF SERIALS

The major difference between monographs and periodicals (to stay away from the grey area in between) is that a serial is a long-term acquisition. Serials go on over the years and they consume more money per period and/or volume and require different management. They are catalogued but the contents is not indexed. The bibliographical files function as central records since practically all aspects can change, including title, frequency and price of the publications. Some issues of the index may never arrive, which has implications for binding.
Compared with other library operations, the serials department is a mosaic where many variant and difficult, often detailed, data aspects are being recorded locally.
Huibert Paul * recently wrote: "A comprehensive serials file is a heap of dynamite that had better be handled by experts in an official setting rather than by dispersed amateurs".

A subscription agent's administration bears an amazing resemblance to a library's serials administration.

Some points of analogy:

1. cataloguing and searching
2. ordering
3. claiming
4. financial control
5. reporting

* Serials Librarian of the University of Oregon Library.

In our case we extend the similarity to cover

6. check-in
7. routing
8. duplicate issue storage and dispersal
9. management reports
10. statistics

Bibliographical files should not only present currently known data but also provide past data. In addition these files should be able to refer to future, and consequently, unknown data.

Many of these data, however, can be put into three groups, which may partially overlap:

1. bibliographical
2. control of receipt
3. financial administration

To list some of the more important elements in these groups:

ISSN
ISBN
Title description
Short title
Alternative title
Abbreviated title
Subtitle description:
- title of a particular volume/part
- part of a group title

Former title
Date of change
Last volume/first volume
Editor's name(s)
Author's name(s)
Language
Multiple language editions
Translation
Translation references
Geographic editions

Name of publisher
Address of publisher
Name of distributor if different
Address of distributor
Format
Number of pages
Version: printed/film/fiche
Positive/negative
Period of publication
Number of volumes per year
Number of issues per year
Number of issues per volume
Sequential numbering
Special volumes
Special issues
Special parts
Combined volumes
Combined issues
Additional volumes
Additional issues
Separate index
Multiple year index
Short description
Classification: UDC/Dewey, etc.
Codes like LC, OCLC, PICA, KNIGA
First year of publication
Last year of publication/ceased
Temporarily suspended
Resumed publication
Location and coding, e.g. shelfmark number
Circulation and patrons
Binding
Order date
Order code
Renewal date
Standing order/One year only/Multiple year
Direct order/Membership/Exchange/Deposit
Name for membership
Subscription price in original currency

Seamail/Airmail and postage rates if separate
Exchange rates
Converted purchase price
Supplier/Agent
Invoice details
Payment details
Claimed issues
Duplicate issues
Issues received
Damaged/incomplete issues

As a subscription agent we have to maintain additional records for the administrative and financial requirements of both publishers and library customers.

FAST® SYSTEM

In addition to our "classic" subscription service, we have designed an external check-in and serials control system for libraries. This is the FAST service.
Instead of shipping directly to libraries, Swets requests publishers to send material to either our office in Philadelphia or to our main office in Lisse.
Both offices register all incoming issues. Forthcoming issues are pregenerated by the computer and when title, year, issue number and number of copies are similar to the screen, the terminal user just presses ⟨ENTER⟩ to process. A local line-printer will then start producing routing slips. If we receive more than the anticipated number of copies, the computer will assign numbers to stock. We hold a stock of more than 100,000 duplicate issues, mostly due to an ever-increasing inaccuracy on the part of publishers and their mailing-houses. If we do not receive the required number of copies, a claim will be issued automatically. Any discrepancy at this point will be passed on to a specialized group.
For each title we have registered frequency details and supply patterns. Bibliographical frequency may differ from the actual frequency as seen by the check-in department staff. Based on this information the system predicts expected publication dates and claims for issues that are late in receipt. This "auto-claim" module has been one of the more difficult but fascinating cornerstones of our FAST service.

Over the past 12 years the Swets FAST service has been discovered by many libraries all over the world. We now handle more than 90,000 subscriptions via FAST (over 600,000 issues a year) and sometimes process as many as 10,000 transactions a day. The by-product is comprehensive knowledge of publication dates and publishers' information. FAST has now been optimally automated and we provide a completely integrated reporting system on all aspects of periodical registration. Library users have reported that the FAST service has led to reduction in staff time, and certainly in supply time.

SAILS

Swets has repeatedly been asked whether we would be willing to sell our FAST software because the check-in module has received high praise from librarians visiting our company.
Our system was designed to work in and for an agency and therefore it would not function for libraries until altered. However, Swets has recognized the need for a high level software package for library usage and our Data-processing staff has been working devotedly on a system to support libraries in most of their areas of operation.
For this new system we use the same logic language (Cobol) and our knowledge of serials. It has been designed for installation on a mainframe or as a stand-alone system. The logic of the system has been used for years and is therefore well tested. Accuracy, efficiency and absolute security are a matter of course. Automatic recovery is part of the built-in security. It is user-friendly so anyone can learn to work with it after a short training period.
Swets sees serials management as a most prominent library function when it comes to automation. It is much more complex than is generally expected. In relation to other library operations we can imagine that a serials system can therefore work as an additional independent system, but we are developing a complete library system, including cataloguing facilities and circulation. We intend to market the new system under the name "SAILS", the "Swets Automated Independent Library System".
As such it will be one of the first complete systems on the market. Based on our own extensive experience we made sure that it can cope with many individually identified needs.

Much attention has been paid to security, general access for patrons and users, and privileged access for the experienced library staff.

Swets believes in decentralization and we expect and have already observed that libraries will use all kinds of micro- and minicomputers creatively and effectively. Hardware costs are still going down and hardware is becoming more and more powerful. Transmission costs, especially on an international basis, will remain expensive. We foresee that there will be a return to local systems, which may be or will be linked to networks and to databases.
A very important factor is that serials information is considered to be "private" information. We notice that most libraries prefer to keep control over their serials. Resource sharing in cataloguing provides many advantages, but acquisitions, administration and management information is "private". The creation of an in-house database for "private files" has now been made possible. Reports such as lists per author, editor, frequency, keywords, KWIC & KWOC, country, publisher, supplier, language, currency, etc. can be produced.

FAST VERSUS SAILS

FAST and SAILS may seem to be in competition with each other, in fact they are not. FAST is a service where we reduce supply time by means of airfreight delivery where we check-in, control and claim on behalf of a library. The library does not need to claim any more and the actual registration will be facilitated by packing-slips and bi-monthly cumulative reports, which can be produced in a great many versions. We can speed up the registration by offering machine-readable data. We are also able to obtain serials at local rates and save on acquisition costs. But FAST is an external or delegated service. Although a complete insight and hence forth control is being offered, you are relying on a third party. Under the FAST service we cannot handle your exchange subscriptions and we have to consult on non-latin publications (Arab, Russian, Japanese, Chinese etc.).
The FAST service charge depends on the average journal price, the number of issues per year, the frequency of shipment and the location of the library. Freight charges will be invoiced at the nominal rates.

The FAST system has been set up as a non-profit service in addition to our traditional role. All in all FAST is being offered at a price you can afford.
Based on recent inquiries in Europe we have come to the conclusion that the average cost in a library for similar work may be near 24% of the serials budget, including overhead. (Surprisingly few statistics are available and in this connection please refer also to Dr. Shaw's * contribution to the 1980 Essen Symposium on "Current Trends in Serials Automation" on "Costs and Benefits of On-Line Serials Handling").

With SAILS we offer a complete system for internal = independent library use. In future you may link it to our computer for periodic exchange of information, ordering, claiming, etc., so that transmission costs can be kept to a minimum. SAILS presents many added options and you can implement the system on the library computer, the university computer, or other central facilities for a group of libraries in a town, region or country.

CONCLUSION

Much will depend on future demand and the requirements of serials management. This still has to be outlined and formalized, but we seem to detect two mainstreams in automated serials handling: the use of "outside" services and the trend towards complete library packages. For both you can call on Swets. We shall be happy to present FAST and SAILS in more detail to you and evaluate your special requirements.

Going back to our starting point, we would like to state that there may be a perfect future for serials handling. And it may have seemed far away until today. It has been our privilege to present some new developments from Swets and we hope to have contributed to bridge the gap between yesterday and tomorrow.

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* Keeper of Scientific Books, Radcliffe Science Library, Oxford University

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